Executive Summary

South Los Angeles Area High School # 1/ Jefferson New Continuation High School
Santee Dairy Site

The Department of Toxic Substances Control (DTSC) has been involved with the site investigation for South Los Angeles Area High School #1 (also known as Santee Dairy) since we learned that the unauthorized demolition debris was used as fill material at the school. The Los Angeles Unified School District (LAUSD) was required to sample the fill soil for contamination. Three areas at the site were the focus of sampling: the Administration Building, the Gymnasium, and the former rubble stockpile/berm area.

Results of this sampling and a risk assessment were included in a report dated June 17, 2005. After careful review, DTSC determined that the demolition debris that was used as fill material does not pose a significant health risk to the students, staff, and visitors.

In the risk assessment, the site was evaluated as if people are living on the property day in and day out. It was assumed that people are on the site 24 hours per day, seven days per week, for 30 years. In addition, it is assumed that they are children during part of the 30 years. DTSC evaluated a number of ways people can come into contact with the soil, including breathing dust, eating small amounts of soil, and getting the soil on their skin.

Soil samples were collected from surface to 10 feet, and at deeper depths down to 30 feet. Thirty-two chemicals were evaluated in the risk assessment, including:

- metals (such as hexavalent chromium)
- PCBs (polychlorinated biphenyls)
- SVOCs (semi-volatile organic compounds), such as PAHs (polycyclic aromatic hydrocarbons)
- petroleum-related hydrocarbons, such as benzene.

Of the 32 chemicals evaluated, only two chemicals, hexavalent chromium and PCBs, presented a slight health risk. Hexavalent chromium is often associated with chrome plating activities and PCBs were used as cooling agents in electrical transformers. DTSC summed all the potential cancer risks from all of the chemicals for the soils closest to the surface (0 to 10 feet) and then for all the soils combined (0 to 30 feet). The following summarizes the potential cancer risks:

Areas Tested	Potential Cancer Risk Levels
Site-wide soils 0 to 10 feet	1 person in 1 million people (1×10^{-6})
Site-wide soils 0 to 30 feet	3 people in 1 million people (3×10^{-6})
Administration Area 0 to 10 feet	Less than 1 person in 1 million people ($>1 \times 10^{-6}$)
Administration Area 0 to 30 feet	4 people in 1 million people (4×10^{-6})
Gymnasium 0 to 14 feet	Less than1 person in 1 million people ($>1 \times 10^{-6}$)

Depths are approximate.

For school sites, DTSC generally considers risks of less than 10 people in 1 million people or less than 1 person in 1 hundred thousand ($>10 \times 10^{-6}$ or $>1 \times 10^{-5}$) to not pose a significant health risk. This risk management decision is consistent with other State and Federal agencies risk management approaches. Since the risks were very low, DTSC determined that the remaining low levels of chemicals did not pose a significant health risk, and no further actions are required.

The risk assessment focused on two chemicals, hexavalent chromium and PCBs. For comparison purposes, the following table presents the soil concentrations that were found on the site and the California Human Health Screening Levels (CHHSLs) developed by the California Environmental Protection Agency (Cal/EPA). CHHSLs are soil screening concentrations used for initial evaluation of sites and they are not clean up goals. CHHSLs are based on a cancer risk of 1×10^{-6}. The soil concentrations for the site include both the highest levels (maximum concentrations) and the 95% UCL, which is an estimate of the overall site concentrations. The 95% UCL is the soil concentration which is usually used in the risk assessments.

		Hex Chrome			**PCBs**	
Areas Tested	Maximum Conc. (mg/kg)	95% UCL Conc. (mg/kg)	Cal/EPA CHHSL (mg/kg)	Maximum Conc. (mg/kg)	95% UCL Conc. (mg/kg)	Cal/EPA CHHSL (mg/kg)
Site-wide Soils 0 to 10 feet	0.6	NC	17	0.05	NC	0.09
Site-wide Soils 0 to 30 feet	44	6.4	17	0.79	0.45	0.09
Admin. Area 0 to 10 feet	0.5	NC	17	0.05	NC	0.09
Admin. Area 0 to 30 feet	44	19.9	17	0.79	0.52	0.09
Gymnasium 0 to 14 feet	0.39	0.2	17	ND	ND	0.09

- **NC** - Not calculated. *Maximum concentrations were evaluated in the risk assessment for the* upper 10-feet of soil where people will have the greatest potential for exposure.
- **ND** – Not detected.
- **95% UCL** is the 95 percent upper confidence limit is an estimate of the overall soil concentration. This value is often used in site risk assessments.

The shaded rows in both of the tables represent the soil concentrations and corresponding risks in the top ten feet of soil. Neither hexavalent chromium nor PCBs in the top 10 feet of soil present a significant health risk and the soil concentrations are below the CHHSL value. The highest concentrations of hexavalent chromium and PCBs were below 20 feet of soil and, even though the values were somewhat higher than the CHHSLs, the overall health risk is below the DTSC risk management threshold of ten in a million (10×10^{-6} or 1×10^{-5}). Based on the risk assessment, DTSC determined that the rubble buried at South Los Angeles Area High School #1 does not pose a significant health risk to students and faculty.

Alan C. Lloyd, Ph.D
Agency Secretary
Cal/EPA

Department of Toxic Substances Control

5796 Corporate Avenue
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Arnold Schwarzenegger
Governor

September 14, 2005

Mr. Angelo Bellomo, Director
Environmental Health and Safety
Los Angeles Unified School District
333 South Beaudry Street, 20th Floor
Los Angeles, California 90071

CONFIRMATION SOIL SAMPLING REPORT, LOS ANGELES UNIFIED SCHOOL DISTRICT, PROPOSED SOUTH LOS ANGELES AREA HIGH SCHOOL #1 AND JEFFERSON NEW CONTINUATION HIGH SCHOOL (FORMER SANTEE DAIRY SITE), 231 EAST 23rd STREET, LOS ANGELES (SITE CODE: 304247-11)

Dear Mr. Bellomo:

The Department of Toxic Substances Control (DTSC) has reviewed the revised Confirmation Sampling Report (Report) prepared by GeoSyntec Consultants for the proposed South Los Angeles Area High School #1 and Jefferson New Continuation High School (Site) dated July 21, 2005. The Report presents data collected during investigation activities and conclusions based on an updated risk screening evaluation for the Site.

Based on the information presented in the Report, no actual or potential release of hazardous material, or the presence of naturally occurring hazardous material which would pose a threat to human health or the environment under any land use was indicated at the Site. Therefore, DTSC concurs with the report conclusions that no further environmental investigation or cleanup is required at the Site. As with any real property, if a previously unidentified release or presence of hazardous material is discovered at the Site, additional investigation and/or cleanup may be required.

If you have any questions please contact Mr. Ryan M. Atencio, Project Manager, at (714) 484-5340, or me at (714) 484-5310.

Sincerely,

Peter A. Garcia, Chief
Cypress Branch
School Property Evaluation and Cleanup Division

cc: See next page.

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